Attachment 8
Suggested Testing Protocol for Establishing Baseline Values Required by NSPS Subpart AAa1

This protocol outlines the specific requirements that should be met when Nucor establishes baseline values as required by New Source Performance Standards (NSPS), Subpart AA, 40 C.F.R. § 60.274 and NSPS Subpart AAa, 40 C.F.R. § 60.274a. The requirements for testing herein are not meant to be all-inclusive, and do not relieve Nucor of its obligations to consult the regulations and to comply with any provision applicable to the facility:

(1) Nucor must furnish EPA with a written report of the performance testing to determine compliance with the particulate matter standards in § 60.272a(a)(1). The report must contain the information which is specified in § 60.276a(f). The information which is specified in § 60.276a(f)(6) is also specified in § 60.274a(h);

(2) Nucor must submit the information for furnace static pressure and volumetric flow rate which is specified in § 60.275a(f). This information must be obtained during the particulate matter runs. If the Reference Method 9 observations for shop opacity are used to determine compliance with the standard in § 60.272a(a)(3) during the particulate matter runs, this information must be submitted for the periods of observation of the shop opacity;

(3) Nucor must conduct three (3) runs to determine compliance with the standard for particulate matter in § 60.272a(a)(1). Reference Method 5D, a sampling time of at least four (4) hours per run, and a sample volume of at least 160 dscf, are specified in § 60.275(e)[1/];

(4) The minimum total time for visible emission ("VE") observations is three (3) hours (thirty (30, six (6)-minute-averages). Pursuant to § 60.275a(e)(4), test runs shall be conducted concurrently to demonstrate compliance with § 60.272a(a)(1), (2), and (3), unless

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[1/] Facilities subject to NSPS, Subpart AA, should cross check monitoring requirements with 40 C.F.R. 60.274.

inclement weather interferes. Therefore, VE observations using Reference Method 9 to determine compliance of the melt shop emissions with the opacity standard in § 60.272a(a)(3) and the control device emissions with the opacity standard in § 60.272a(a)(2) should be conducted for a minimum of three (3), sixty (60)-minute observation periods;

(5) Nucor should record a fifteen (15)-minute average and establish a baseline for fifteen (15)-minute averages for furnace static pressure if meltshop opacity observations are not recorded in accordance with 60.272a(a)(3); and

(6) If the volumetric flow rates are recorded by Continuous Emission Rate Monitoring Systems (CERMS), paragraph (h) of º 60.13 of NSPS Subpart A, requires that the CERMS flow data must be reduced to 1-hour averages. An averaging time for the baseline value for flow through each separately ducted hood is not specified in NSPS Subpart AAa. As such, compliance with standard for shop opacity in § 60.272a(a)(3) is determined by a six (6)-minute average; whereas a one (1)-hour average is specified for the CERMS flow data in § 60.13(h). Therefore, each baseline value for the CERMS flow should be an 1-hour average. Each baseline value for CERMS flow should be established at a value which is less than the average reference method flow during the three (3) runs of the compliance tests for particulate matter. Nucor can, perhaps, use the data from relative accuracy tests to determine and justify the amount by which the baseline value for CERMS flow should be less than the average reference method flow during the compliance tests.

(7) Before conducting the tests. Nucor should review with its contractor performing the tests the procedure for calculating isokinetic variation for Reference Method 5D. EPA can not accept results for particulate matter testing, and consequently the baseline values for furnace static pressure and volumetric flow rate, if the correctly calculated isokinetic variation is not within the specified range of 90% to 110%.